

In the Claims:

Please amend the claims as follows.

1. (Currently amended) A process for the preparation of water-absorbent, foam-type polymer structures, wherein an aqueous composition (A) containing

(A1) water,

(A2) one or more polymers based at least on

(α 1) from about 55 to about 100 wt.% of a polymerized, monoethylenically unsaturated, acid-group-containing monomer or its salt thereof, ~~and on~~

(α 2) from 0 to about 45 wt.% of a polymerized, monoethylenically unsaturated monomer that is copolymerizable with (α 1),

wherein the sum of the amounts by weight of (α 1) and (α 2) is 100 wt.% and wherein at least about 31.5 wt.% of the monomers, based on the total weight of the monomers (α 1) and (α 2), are acrylic acid or salts of acrylic acid,

(A3) one or more crosslinkers,

(A4) one or more blowing agents,

(A5) one or more surfactants,

(A6) and optionally further auxiliary substances,

is foamed, and the foamed aqueous composition is then heated at a temperature in a range of from about 50 to about 300°C, so that the polymer (A2) crosslinks at least partially and the content of water (A1) is adjusted to not more than about 15 wt.%, based on the total weight of the foam-type polymer structure that forms.

2. (Currently amended) ~~Process~~ The process according to claim 1, wherein the polymer (A2) has a number-average molecular weight of at least about 10,000 g/mol.[.]

3. (Currently amended) ~~Process~~ The process according to claim 1 ~~or 2~~, wherein the foamed composition has a foam litre weight of from about 10 to about 1000 g/l.

4. (Currently amended) ~~Process~~ The process according to claim 1 ~~one or more of claims 1 to 3~~, wherein the surface of the absorbent, foam-type polymer structure is smoothed in a further process step.
5. (Currently amended) A water-absorbent, foam-type polymer structure obtainable by a process according to claim 1 ~~to 4~~.
6. (Currently amended) ~~Water-absorbent~~ A water-absorbent, foam-type polymer structure according to claim 5, wherein the polymer structure has at least one of the following properties:
 - (β1) an AUL (absorbency under load) of 0.9% NaCl solution under a load of 0.3 psi of at least about 10 g/g;
 - (β2) a rate of absorption of more than about 1 g/g/sec;
 - (β3) a maximum absorption capacity in a range of from about 20 to about 300 g/g;
 - (β4) a CRC (centrifugation retention capacity) in a range of from about 7.5 to about 100 g/g;
 - (β5) a mean pore size in a range of from about 0.01 to about 2 mm;
 - (β6) a mean pore density in a range of from about 60 to about 1200 g/m².
7. (Currently amended) A water-absorbent, foam-type polymer structure containing
 - (B1) from about 20 to about 99.99 wt.%, based on the total weight of the polymer structure, of one or more crosslinked polymers based at least on
 - (γ1) from about 50 to about 99.9 wt.% of a polymerized monoethylenically unsaturated, acid-group-containing monomer or its salt,
 - (γ2) from 0 to about 45 wt.% of a polymerized monoethylenically unsaturated monomer that is copolymerizable with (γ1), and
 - (γ3) from about 0.001 to about 5 wt.% of one or more crosslinkers,

wherein the sum of the amounts by weight of (γ 1) to (γ 3) is 100 wt.% and at least about 31.5 wt.% of the monomers, based on the total weight of the monomers (γ 1) and (γ 2), are acrylic acid or a salt thereof,

(B2) from about 0.01 to about 30 wt.% of one or more additives, based on the total weight of the polymer structure, and

(B3) from 0 to about 15 wt.% of water, based on the total weight of the polymer structure,

wherein the sum of the amounts by weight of (B1) to (B3) is 100 wt.% and wherein the water-absorbent, foam-type polymer structure has the following properties (β 1) and (β 2):

(β 1) an AUL (Absorbency under Load) of 0.9% NaCl solution at a load of 0.3 psi of at least about 10 g/g;

(β 2) an absorption speed of more than about 2 g/g/sec.

8. (Currently amended) ~~Composite~~ A composite comprising a water-absorbent, foam-type polymer structure according to claim 5 ~~to 7~~ and a substrate.
9. (Currently amended) ~~Process~~ A process for the production of a composite according to claim 8, wherein the water-absorbent, foam-type polymer structure ~~a foamed composition as defined in claim 1 to 3~~ is brought into contact with at least a portion of the surface of a substrate and the substrate brought into contact with the ~~foamed composition~~ water-absorbent, foam-type polymer structure is then heated at a temperature in a range of from about 50 to about 300°C so that the polymer (A2) crosslinks at least partially, the content of water (A1) is adjusted to not more than about 15 wt.%, based on the total weight of the foam-type polymer structure that forms, and the resulting foam-type polymer structure is immobilized on at least a portion of the surface of the substrate.
10. (Currently amended) ~~Process~~ A process according to claim 9, wherein the substrate is a film selected from the group consisting of polymeric film, metal, nonwoven, fluff, tissue, woven fabric, natural fiber, synthetic fiber and foam of polymers, such as, for ex-

~~ample, of polyethylene, polypropylene or polyamide, a metal, a nonwoven, a fluff, a tissue, a woven fabric, a natural or synthetic fiber, or another foam.~~

11. (Currently amended) ~~Process~~ A process according to claim 9 ~~or 10~~, wherein templates are used during application of the ~~foamed, aqueous composition~~ water-absorbent, foam-type polymer structure to the substrate.
12. (Currently amended) A process for the production of a composite according to claim 8, wherein at least a portion of the surface of a water-absorbent, foam-type polymer structure ~~according to any one of claims 5 to 7~~ claim 5 is brought into contact with at least a portion of the surface of a substrate, and the polymer structure is then immobilized on at least a portion of the surface of the substrate.
13. (Currently amended) ~~Process~~ A process according to claim 12, wherein the substrate is a thermoplastic sheet-form structure.
14. (Currently amended) ~~Composite~~ A composite obtainable by a process according to claim 1 ~~one or more of claims 9 to 13~~.
15. (Cancelled)
16. (Currently amended) A ~~Chemical products~~ chemical product ~~containing~~ comprising a water-absorbent, foam-type polymer structure according to ~~one or more of claim 5~~ claims 5 to 7 ~~that absorbs water and aqueous liquids, or a composite according to claim 9 or 14.~~
17. (New) A chemical product comprising a composite of claim 8.